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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
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	7590 07/08/201 KWELL SANDERS L	EXAMINER				
190 Carondelet Plaza			KWIECINSKI, RYAN D			
Suite 600 ST. LOUIS, MO 63105			ART UNIT	PAPER NUMBER		
				3635		
			NOTIFICATION DATE	DELIVERY MODE		
			07/08/2010	ELECTRONIC		

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pto-sl@huschblackwell.com

	Application No.	Applicant(s)			
Office Action Comments	10/597,340	GORDON, CLIFF			
Office Action Summary	Examiner	Art Unit			
	RYAN D. KWIECINSKI	3635			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1)⊠ Responsive to communication(s) filed on 20 Ju	ılv 2006				
<i>;</i> —	, <del>_</del>				
•	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
closed in accordance with the practice under Ex parte Quayle, 1933 C.D. 11, 433 C.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) 1-26 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-26 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) ☐ The specification is objected to by the Examiner.					
10)⊠ The drawing(s) filed on <u>07 June 2008</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 7/20/2006.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	te			

#### **DETAILED ACTION**

## **Drawings**

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

## 1) grub screw 36

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the glazing component connector in combination with the first and second glazing component as part of the entire structure as described in the specification. It is essential that the combination of the connector and components be shown in the entire structure of Figure 10; it is not clear from the figures where the connector and the glazing components are specifically located

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in the whole structure. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The

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abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

# The disclosure is objected to because of the following informalities:

Page 10, Paragraph 2, line 1, "hearing" appears it should be -herein--.

Appropriate correction is required.

# Claim Objections

Claims 19 and 24 are objected to because of the following informalities:

Claim 19, line 6, "the second the glazing" should be –the second glazing--.

Claim 24, line 2, "the glazing clip" should be –the locking clip--.

Appropriate correction is required.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, it is unclear whether the "locking clip" is a portion of "the first part" or a portion of the "second part". The specification discloses that the locking clip is the second part of the connector, but claim 1 appears to recite the first part comprising a head, a shank, and a locking clip. The claims have been examined as best understood as the head and shank as the first part and the clip as the second part.

Claim 17, line 2, the recitation "in a manner according to" renders the claim, vague, indefinite, and confusing. The recitation appears to be claiming the method in which the first glazing component is connected to the second glazing component, but claim 12 is directed to a structural combination of a first glazing component and a second glazing component. The claim has been examined based on the structural limitations of the claims and not the method in which the glazing components have been connected.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-17 and 19-25 are rejected <u>as best understood</u> under 35 U.S.C.

103(a) as being unpatentable over US 6,041,563 to Vollers in view of US 7,226,233

B2 to SuBenbach et al. in view of US 2,922,670 to Davies et al.

#### Claim 1:

Vollers discloses a glazing component connector (10, Fig.1) comprising a first part (10), the first part comprising a head (11) for reception by a complementary channel (8), from which head extends a shank (12) for enabling connection to another glazing component.

Vollers does not disclose a second part of a connector comprising a locking clip for locating about the head thereby to secure the first part to the channel.

SuBenbach et al. disclose a connector comprising a locking clip (14, Fig.1) for locating about the head (46) thereby to secure the first part to an adjacent structure (2).

Davies et al. discloses a connector comprising a locking clip (13) for locating about the head (18) thereby to secure the first part to the channel (the clip is cylindrical

which will allow the clip to be inserted into the channel of Vollers in the same manner that the clip of SuBenbach is inserted into the channel).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the connector of Vollers with an elongated cylindrical locking clip as taught by Davies inserted into a channel to receive the head of the first part of the connector in order to lock the first part of the connector into the channel as disclosed by SuBenbach. Vollers discloses the head being secured into the channel of the glazing component, but the addition of a locking clip will further secure the head in the channel of the glazing component. The clip will also provide a different surface for the head to rotate on to eliminate any wear and tear that may occur to the channel of the glazing component of Vollers when the head is rotated to secure the glazing components at different angles. It would have been obvious to have formed the clip of SuBenbach with an elongated structure as taught by Davies but retain the holding clips in order to allow the clip to extend a farther distance so that the head can be located as different portions of the channel.

#### **Claims 2-11:**

Vollers in view of SuBenbach et al. in view of Davies et al. discloses the connector of claim 1:

**Regarding claim 2**, SuBenbach and Davies disclose in which the locking clip is generally C-shaped (cross section of 14, Fig.2; and Fig.6, respectively).

**Regarding claim 3**, SuBenbach also disclose in which the ends of the C-shaped clip comprise diverging feet (44).

Regarding claim 4, SuBenbach also discloses in which the locking clip comprises at least one hole (36) therethrough. Vollers also discloses wherein a screw (18) can be inserted into the head of the first part of the connector.

**Regarding claim 5**, in which the hole is suitable for receiving a grub screw for securing the first part in position (the hole is capable of receiving the screw of Vollers).

**Regarding claim 6**, SuBenbach also discloses in which the hole is opposite the open part of the C-shaped clip (Fig.2).

Regarding claim 7, SuBenbach fails to disclose in which the clip comprises three holes therethrough. Vollers discloses the head 11 can be located along the cylindrical channel and in different angular positions. This teaching in combination with the elongated clip of Davies and the structure of the clip of SuBenbach would have rendered it obvious to have formed multiple holes in the elongated clip in order to be able to secure the head at multiple positions along the elongated channel.

**Regarding claim 8**, Davies also discloses in which the locking clip comprises a shaped part (26, 27) to receive the shank of the first part.

Regarding claim 9, SuBenbach also discloses in which the locking clip comprises a guide tab (spring arms 38 which are located centrally in the channel) extending therefrom.

**Regarding claim 10**, Davies also discloses in which the head comprises a truncated ball (18).

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Regarding claim 11, Vollers discloses wherein the shank can be anchored in a column, wall, floor, or ceiling. SuBenbach and Davies both disclose wherein the shank has an external thread (Column 5, lines 11-12; and 20, Fig.2, respectively).

#### Claim 12:

Vollers discloses a first glazing component (1) comprising a channel (8), a glazing component connector according to claim 1 (see above), wherein the head fits within the channel (11 fits in 8) and the locking clip fits between the outside of the head and the inside of the channel (SuBenbach discloses wherein the head fits in the locking clip which fits in a channel), and a second a glazing component (Column 7, lines 17-19; the shank can be connected to the wall, ceiling, column, floor) connected to the first glazing component by the first part of the glazing component connector.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the structure of Vollers with the shank connecting the first glazing component to a second glazing component in order to form an entire structure of glazing components such as a porch, sun room, etc. It is well known in the art to connect adjacent glazing components to form transparent glazing structures.

### Claims 13-16:

Vollers in view of SuBenbach et al. in view of Davies et al. discloses the connector of claim 12:

**Regarding claim 13**, Vollers also discloses in which the channel is a longitudinal channel (8).

**Regarding claim 14**, Vollers also discloses in which the channel is generally C-shaped (8).

**Regarding claim 15**, Vollers also discloses in which the first glazing component comprises a wall plate (Column 1, lines 6-26).

**Regarding claim 16**, Vollers also discloses in which the angle of the first glazing component relative to the second glazing component can be varied by pivotal movement of the connector (Column 7, lines 29-36).

### Claim 17:

Vollers also discloses a structure (Column 1, lines 6-26) comprising a first glazing component connected to a second glazing component in a manner according to claim 12 (See claim 12 above).

### Claim 19:

Vollers discloses a method of connection of a first glazing component (1) to a second a glazing component (Column 7, lines 17-19), the first glazing component comprising a channel (8), the method comprising the steps of providing a glazing component connector according to claim 1 (See claim 1 above), inserting one of the first part and the second part into the channel (Vollers discloses inserting the first part and SuBenbach discloses inserting the second part) of the first glazing component, inserting

the other of the first part and the second part into the channel of the first glazing component (Vollers discloses inserting the first part and SuBenbach discloses inserting the second part) and connecting the second glazing component to the first glazing component using the shank of the first part (Vollers discloses using the shank to anchor the first component to a wall. floor, ceiling, etc.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the structure of Vollers with the shank connecting the first glazing component to a second glazing component in order to form an entire structure of glazing components such as a porch, sun room, etc. It is well known in the art to connect adjacent glazing components to form transparent glazing structures.

#### Claims 20-24:

Vollers in view of SuBenbach et al. in view of Davies et al. discloses the connector of claim 19:

**Regarding claim 20**, but does not specifically disclose in which the first part is inserted into the channel before the second part.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have inserted the head into the channel and then slidingly inserted the elongated locking clip of Davies into the channel to further secure the head of the connector in place. Whether the head in snap fitted into the clip and channel or whether the head is slidingly engaged in the clip and channel do not affect the final

structure of the overall connection. Snap fitting and slidingly engaging members to one another are methods that are well known in the art.

**Regarding claim 21**, Vollers discloses in which the channel comprises a longitudinal opening therein, and the first part is inserted into the longitudinal opening of the channel (Column 7, lines 37-39).

**Regarding claim 22**, but do not specifically disclose in which the locking clip is moved axially over the first part.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have inserted the head into the channel and then slidingly inserted the elongated locking clip of Davies into the channel to further secure the head of the connector in place. Whether the head in snap fitted into the clip and channel or whether the head is slidingly engaged in the clip and channel do not affect the final structure of the overall connection. Snap fitting and slidingly engaging members to one another are methods that are well known in the art.

**Regarding claim 23**, SuBenbach in view of Davies discloses wherein an elongated locking clip is inserted into the channel of Vollers.

**Regarding claim 24**, but do not specifically disclose in which the first part is inserted axially into the channel inside the glazing clip.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have inserted the head into the channel and then slidingly inserted the elongated locking clip of Davies into the channel to further secure the head of the connector in place. Whether the head in snap fitted into the clip and channel or

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whether the head is slidingly engaged in the clip and channel do not affect the final structure of the overall connection. Snap fitting and slidingly engaging members to one another are methods that are well known in the art.

#### Claim 25:

Vollers discloses a method of constructing a structure (Column 1, lines 6-26), which method comprises connecting a first glazing component (1) to a second glazing component (Column 7, lines 17-19) according to claim 19 (See claim 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the structure of Vollers with the shank connecting the first glazing component to a second glazing component in order to form an entire structure of glazing components such as a porch, sun room, etc. It is well known in the art to connect adjacent glazing components to form transparent glazing structures.

Claims 18 and 26 are rejected <u>as best understood</u> under 35 U.S.C. 103(a) as being unpatentable over US 6,041,563 to Vollers in view of US 7,226,233 B2 to SuBenbach et al. in view of US 2,922,670 to Davies et al. in view of US 2006/0201086 A1 to Jones et al.

Claims 18 and 26:

Vollers in view of SuBenbach in view of Davies discloses the structure according to claim 17, but does not specifically disclose in which the structure comprises a conservatory structure.

Jones et al. disclose wherein glazing components (212, 214, Fig. 12A) are connected using glazing component connector (324) in order to form a conservatory structure (Page 1, Paragraph [0001]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed a conservatory structure if it was desired to have a structure formed from glazing panels to allow light to enter and exit the structure and also to allow visibility through the structure. Conservatory structures are well known structures in the art.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN D. KWIECINSKI whose telephone number is (571)272-5160. The examiner can normally be reached on Monday - Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571)272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./
Supervisory Patent Examiner, Art Unit 3635

RDK /Ryan D Kwiecinski/ Examiner, Art Unit 3635